

1/2"=1'-0"

I. THE STRUCTURE IS DESIGNED FOR COMPLIANCE WITH THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE 2010 EDITION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS PUBLICATION "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", ASCE 7-10.

A. SNOW LOAD: (1) GROUND SNOW LOAD, Pg = 80 PSF

(2) EXPOSURE FACTOR Ce = 1.0

(3) THERMAL FACTOR Ct = 1.2

(4) IMPORTANCE FACTOR Is = 1.0 (5) FLAT ROOF SNOW LOAD PF= 67.2 PSF.

(6) SNOW DRIFTING IN ACCORDANCE WITH ASCE 7-10. B. WIND LOAD:

(I) ULTIMATE DESIGN WIND SPEED, Vult = 115 MPH.

(2) NOMINAL DESIGN WIND SPEED, Vasa = 89 MPH.

(3) RISK CATEGORY II

(4) WIND EXPOSURE CATEGORY B.

(5) INTERNAL WIND PRESSURE COEFICIENT, GCpi = +/-0.55

(6) DESIGN WIND PRESSURE FOR COMPONENTS AND CLADDING = +/-20 PSF.

C. EARTHQUAKE LOAD: (I) RISK CATEGORY II

(2) SEISMIC IMPORTANCE FACTOR le = 1.0

(3) MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER Ss = 0.23 (4) MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER SI = 0.079

(5) SITE CLASS D (ASSUMED)

(6) DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER SDS = 0.245 (7) DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER SDI = 0.126

(8) SEISMIC DESIGN CATEGORY B. (9) BASIC SEISMIC FORCE RESISTING SYSTEM = STEEL SYSTEM NOT

SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.

(10) DESIGN BASE SHEAR V = 333 LBS.

(II) SEISMIC RESPONSE COEFFICIENT, Cs = 0.82

(12) RESPONSE MODIFICATION COEFFICIENT, R = 3.0

(13) ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE PROCEDURE. 2. MEASUREMENTS TO EXISTING CONDITIONS ARE APPROXIMATE. THE CONTRACTOR IS

RESPONSIBLE FOR FIELD MEASURING EXSTING CONDITIONS FOR PROPER FIT OF PREFABRICATED ITEMS.

3. STRUCTURAL STEEL COMPONENTS SPECIFIED SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE 2010 EDITION OF SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

A. HOLLOW STRUCTURAL SECTIONS SHALL COMPLY WITH ASTM A500, GRADE B.

B. WIDE FLANGE SHAPES SHALL COMPLY WITH ASTM A992.

C. STEEL ANGLES AND PLATES SHALL COMPLY WITH ASTM A36 D. BOLTED CONNECTIONS SHALL UTILIZE A325N BOLTS UNLESS OTHERWISE

INDICATED. COMPLY WITH THE 2009 EDITION OF SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS. PROVIDE SNUG-TIGHT CONNECTIONS UNLESS OTHERWISE INDICATED.

E. WELDED CONNECTIONS SHALL COMPLY WITH AWS DI.I BY THE AMERICAN WELDING SOCIETY. ALL WELDING SHALL BE DONE BY A WELDER CERTIFIED BY AWS FOR THE POSITIONS AND PROCEDURES TO BE UTILIZED ON THE PROJECT.

F. COLUMNS AND SHOP WELDED ATTACHMENTS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM AI23. BOLTS CONNECTED TO GALVANIZED MEMBERS SHALL BE HOT-DIP GALVANIZED.

G. STRUCTURAL STEEL NOT SPECIFIED TO BE GALVANIZED SHALL RECEIVE FINISH TREATMENT AS FOLLOWS: (I) CLEAN IN ACCORDANCE WITH SSPC SP-6/NACE NO. 3, @COMMERCIAL BLAST

CLEANING. (2) SHOP PRIME WITH 3 MILS DRY FILM THICKNESS OF TNEMEC 90-97, TNEME-ZINC. APPLY IN ACCORDANCE WITH THE MANUFACTURER'S

SPECIFICATIONS. FIELD TOUCH UP ANY DAMAGE IN THE FIELD. (3) PROVIDE 2 COATS OF COMPATIBLE FINISH PAINT: TNEMEC SERIES 27, F.C.

TYPOXY. APPLY TO A DRY FILM THICKNESS IS 4.0 MILS PER COAT. 5. NON-SHRINK GROUT SHALL BE 5-STAR GROUT OR EQUAL COMPLYING WITH ASTM C

1107/C 1107M. 6. INSTALL PROPRIETARY PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S

SPECIFICATIONS. 7. HANDRAILS SHALL BE STEEL PIPE ASTM A53, GRADE B. PROVIDE HOT-DIP GALVANIZED PIPE IN ACCORDANCE WITH ASTM AI23. PROVIDE HOT-DIP GALVANIZED FASTENERS AND OTHER CONNECTED COMPONENTS.

A. PIPE SIZES SPECIFIED ARE NOMINAL. PROVIDE ACTUAL PIPE DIAMETER PER

8. ROOF DECK SHALL BE APA RATED SHEATHING 23/32" THICK WITH SPAN RATING

48/24. A. LAY PANELS WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS AND SHORT

DIMENSION STAGGERED. END OF SHEETS SHALL BEAR ON RAFTERS. B. FASTEN ROOF DECK TO RAFTERS WITH IOD COMMON NAILS (0.148 %%  $\times$  3") @ 6"

O.C. AT SUPPORTED PANEL EDGES AND @ 12"O.C. @ INTERMEDIATE SUPPORTS. 9. ALL FRAMING LUMBER SHALL BE #2 GRADE OR BETTER SOUTHERN PINE, PRESSURE TREATED W/ MICRONIZED COPPER QUAT (MCQ) TO RETENTION FOR USE CATEGORY UC3B PER AMPA STANDARD UI-19.

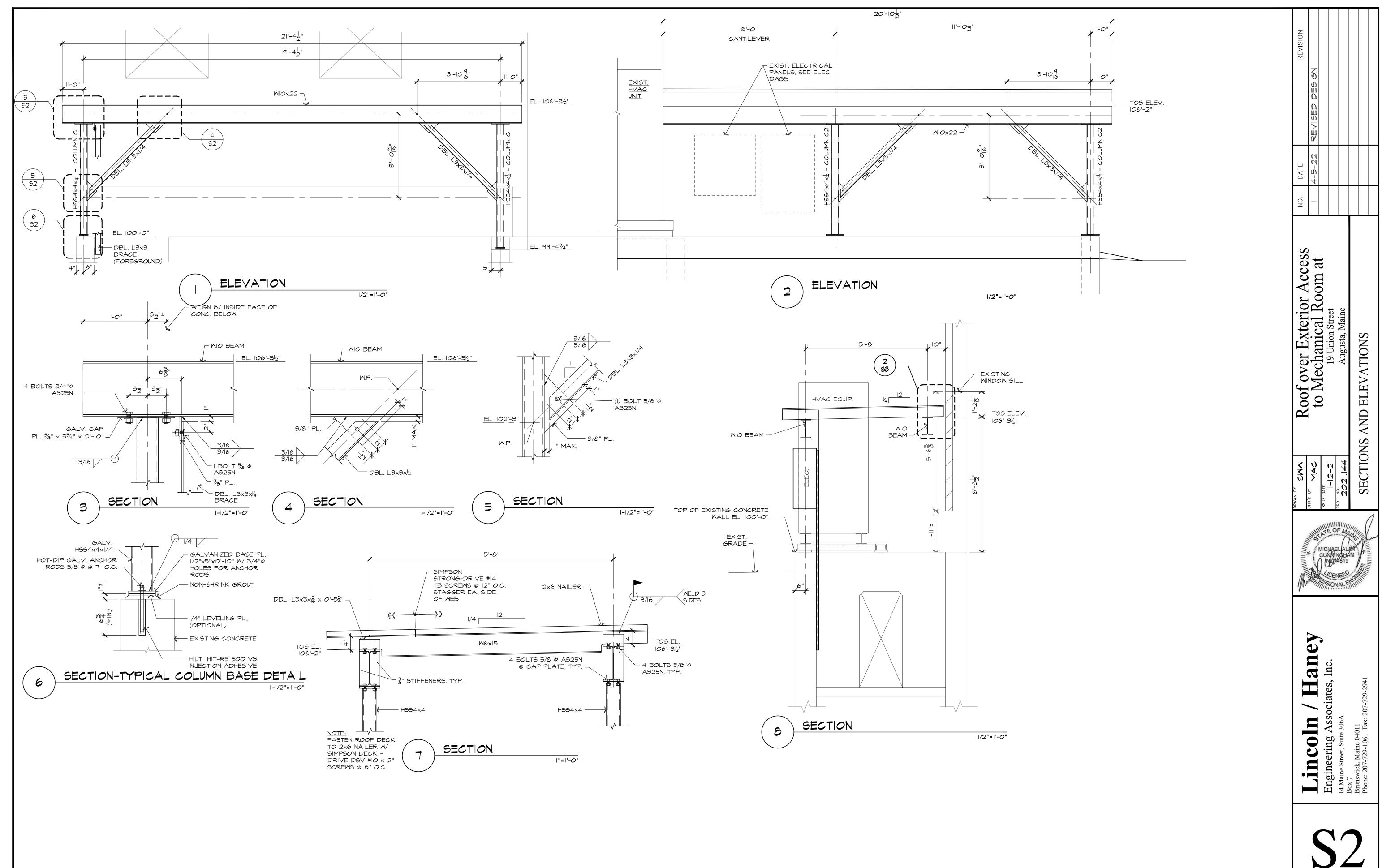
## TIMBER FRAMING NOTES:

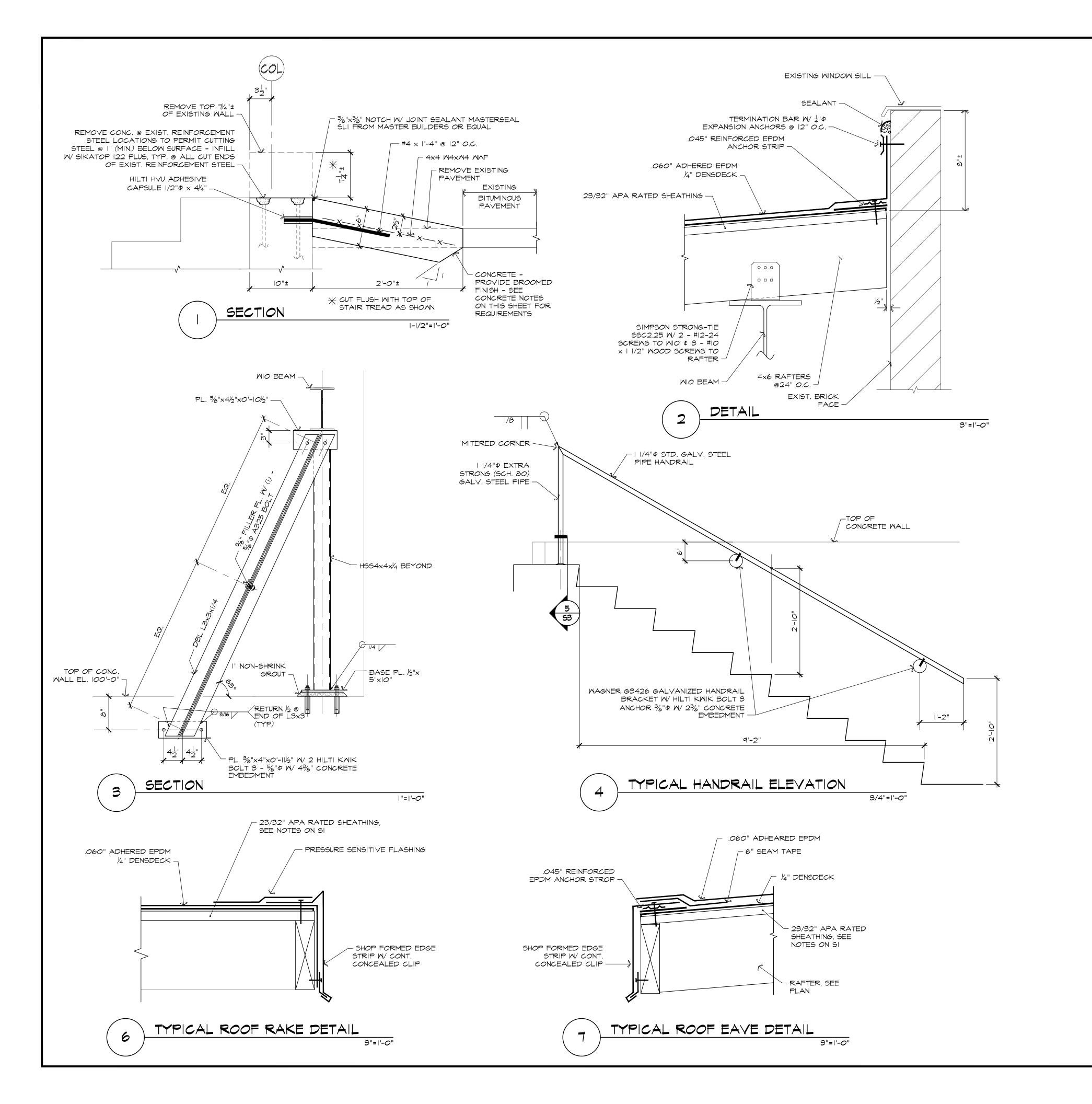
- I. ALL DIMENSION LUMBER SHALL BE #2 GRADE OR BETTER OF SOUTHERN PINE, PRESSURE TREATED WITH MICRONIZED COPPER QUAT (MCQ) TO RETENTION REQUIRED FOR USE CATEGORY UC3B AS DEFINED BY THE AMERICAN WOOD PROTECTION ASSOCIATION (AMPA) STANDARD UI-19.
- 2. ALL FASTENERS SHALL BE HOT-DIP GALVANIZED EXCEPT AS OTHERWISE SPECIFIED FOR PROPRIETARY FASTENERS.
- 3. WHERE SIMPSON STRONG-TIE PROPRIETARY CONNECTORS ARE SPECIFIED, INSTALL WITH FASTENERS SPECIFIED BY SIMPSON STRONG-TIE, EXCEPT AS MODIFIED ON THE
- 4. WHERE FASTENERS ARE NOT IDENTIFIED, COMPLY WITH TABLE 2304.10.1 IN THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE.
- 5. REFER TO NOTE 8 ON SI FOR ROOF DECK INSTALLATION.

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1/2"=1'-0"





## CONCRETE NOTES

- 1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS IN ACI 318-14, ACI 301-05 \$ ACI 117-10.
- 2. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI.
- 3. ALL CONCRETE EXPOSED TO FREEZE-THAW CYCLES IN SERVICE SHALL BE AIR ENTRAINED FOR EXPOSURE CLASS F2 PER ACI 318.
- 4. NO CONCRETE SHALL BE PLACED ON OR IN WATER OR ON FROZEN GROUND.
- 5. DURING COLD WEATHER, CONCRETING PROCEDURES SHALL CONFORM TO ACI 306, COLD WEATHER CONCRETE PRACTICES. MAINTAIN CONCRETE TEMPERATURE ABOVE 50 DEGREES F FOR 7 DAYS AFTER
- 6. DURING HOT WEATHER, CONCRETING PROCEDURES SHALL CONFORM TO ACI 305, HOT WEATHER CONCRETE PRACTICES.
- 7. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185.
- 8. ALL REINFORCEMENT SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE "ACI MANUAL OF STANDARD PRACTICE" (ACI-315).
- 9. ALL LAP SPLICES SHALL BE 6" (MIN.).
- IO. REINFORCEMENT SHALL BE LOCATED AT MID-DEPTH OF CONCRETE SLABS UNLESS OTHERWISE NOTED.

  SUPPORT WELDED WIRE FABRIC ON CHAIRS OR OTHER SUITABLE SUPPORTS AT A MAXIMUM SPACING OF 3
  FEET ON CENTER. THE USE OF LIFTING HOOKS TO SET SLAB REINFORCEMENT IN POSITION IS PROHIBITED.
- II. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".
- 12. CONCRETE MIXTURES SHALL BE COMPRISED OF THE FOLLOWING MATERIALS;
  - A. CEMENT: PORTLAND CEMENT, ASTM C150, TYPE I, TYPE II, OR TYPE I/II. ONE OF THE FOLLOWING SUPPLEMENTARY CEMENTITIOUS MATERIALS (SCM) MAY BE SUBSTITUTED FOR A PORTION OF THE CEMENT IN THE MIX, SUBJECT TO THE LIMITATIONS IDENTIFIED BELOW.
    - (1). FLY ASH: ASTM C 618, CLASS C OR F, 25% MAXIMUM.

      (2). GROUND GRANULATED BLAST-FURNACE SLAG: ASTM°C°989, GRADE 100 OR 120, 50%
  - MAXIMUM.
  - B. AGGREGATES: NORMAL WEIGHT, UNIFORMLY GRADED, CONFORMING TO ASTM C33.

    (I). PROVIDE CLASS 3S COARSE AGGREGATE, COMPLYING WITH SIZE LIMITS IN ACI 301. BLENDED

GRADATIONS OF COARSE AGGREGATE SHALL HAVE A BLEND THAT COMPLIES WITH AN

- AGGREGATE GRADATION SPECIFIED IN ASTM C33.

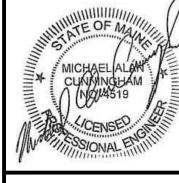
  C. WATER: POTABLE AND COMPLYING WITH ASTM C94.
- D. ADMIXTURES: ADMIXTURES CERTIFIED BY MANUFACTURER TO CONTAIN NOT MORE THAN O.I PERCENT WATER-SOLUBLE CHLORIDE IONS BY MASS OF CEMENTITIOUS MATERIAL AND TO BE COMPATIBLE WITH OTHER ADMIXTURES AND CEMENTITIOUS MATERIALS. DO NOT USE ADMIXTURES CONTAINING CALCIUM
- (I). AIR-ENTRAINING ADMIXTURE: ASTM C260.
- (2). WATER REDUCING ADMIXTURE (OPTIONAL): ASTM C494, TYPE A.
- (3). HIGH-RANGE WATER-REDUCING ADMIXTURE (OPTIONAL):
- ASTM C494, TYPE F.
- 13. MEASURE, BATCH, MIX, AND DELIVER CONCRETE ACCORDING TO ASTM C94 AND ASTM C1116, AND FURNISH BATCH TICKET INFORMATION. CLEARLY INDICATE ON THE BATCH TICKET THE TIME THE CEMENT IS ADDED TO THE MIX
  - A. WHEN AIR TEMPERATURE IS BETWEEN 85 AND 90 DEG°F (30 AND 32 DEG°C), REDUCE MIXING AND DELIVERY TIME FROM 1-1/2 HOURS TO 75 MINUTES; WHEN AIR TEMPERATURE IS ABOVE 90 DEG°F (32 DEG°C), REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.
- B. MIXING TIME WILL BE MEASURED FROM THE TIME THE CEMENT IS ADDED TO THE MIX.

  4. CONSOLIDATE CONCRETE WITH A MECHANICAL VIBRATOR USING FOURMENT AND PROCEDURES.
- 14. CONSOLIDATE CONCRETE WITH A MECHANICAL VIBRATOR USING EQUIPMENT AND PROCEDURES SPECIFIED IN ACI 309R. DO NOT UTILIZE VIBRATORS TO TRANSPORT CONCRETE WITHIN FORMS.
- 15. MAINTAIN CONCRETE CONTINUOUSLY MOIST FOR 7 DAYS AFTER PLACEMENT. ACCEPTABLE CURING METHODS
  - A. LEAVING FORMS ON FORMED SURFACES.
- B. COATING SURFACES WITH AN APPROVED CURING COMPOUND. DO NOT USE CURING COMPOUND WHERE ITS PRESENCE WILL INTERFERE WITH SUCCESSIVE SURFACE TREATMENTS.
- C. COVERING WITH MOISTURE-RETAINING COVER COMPLYING WITH ASTM CITI.

  D. COVERING WITH ABSORPTIVE COVER, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING
- APPROXIMATELY 9 OZ PER SQ YD, COMPLYING WITH AASHTO MI82, CLASS 2. MAINTAIN ABSORPTIVE COVER WET THROUGHOUT CURING PERIOD.
- E. OTHER CURING METHODS MAY BE ACCEPTABLE SUBJECT TO APPROVAL.

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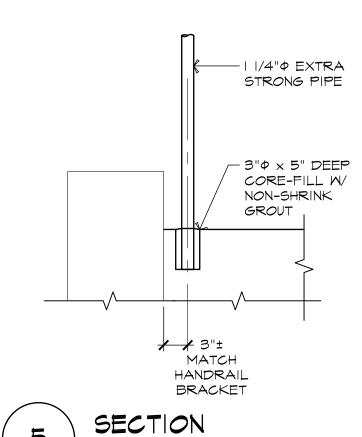


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